

Listing of Claims:

The following listing of claims replaces all previous listings and versions of claims in this application.

1 - 122. (Canceled)

123. (Currently Amended) A system for performing spine surgery, said system comprising:

a first bone screw configured to be screwed into a first vertebra;

a first collar rotatably coupled to the first bone screw, said first collar comprising a first slot having a slot width;

a second bone screw configured to be screwed into a second vertebra;

a second collar rotatably coupled to the second bone screw, said second collar comprising a second slot;

a rod, said rod having a width less than the slot width ~~necessary to fit within the first slot and the second slot~~;

a first sleeve comprising a first channel, said first sleeve having a length longer than a length of the first bone screw, said first sleeve comprising a distal end at one end of the first sleeve and a proximal end at a second end of the first sleeve, said first channel being formed in an opening of a sleeve wall of the first sleeve, and said first channel extending along at least a portion of the length of the first sleeve;

a first closure member configured to be secured to the first collar for securing the rod within the first slot;

a second sleeve, said second sleeve having a length longer than a length of the second bone screw;

a second closure member configured to be secured to the second collar for securing the rod within the second slot,

wherein the distal end of the first sleeve detachably couples to the first collar so that the proximal end of the first sleeve extends away from the first collar and that the first channel is aligned with the first slot,

~~wherein during surgery, when the first slot is aligned with the first channel, the rod is inserted in the first channel for positioning the rod within the first slot, and~~

wherein after the rod, the first closure member[[,]] and the first bone screw are implanted, the distal end of the first sleeve is decoupled from the first collar.

124. (Previously Presented) The system of claim 123, wherein the second sleeve comprises a second channel, said second channel being formed in an opening of a sleeve wall of the second sleeve and said second channel extending along at least a portion of a length of the second sleeve,

wherein the second sleeve and the second collar are configured to couple together so that the second channel is aligned with the second slot.

125. (Previously Presented) The system of claim 123, wherein the first closure member is threaded for threaded engagement with the first collar.

126. (Previously Presented) The system of claim 123, wherein the rod is curved for complimenting a curvature of a spine.

127. (Previously Presented) The system of claim 123, wherein the first channel extends a full length of the first sleeve.

128. (Previously Presented) The system of claim 123, wherein the first sleeve comprises two first channels, such that the first sleeve is a multi-channel sleeve.

129. (Previously Presented) The system of claim 128, wherein the two first channels are on opposite ends of the first sleeve's longitudinal axis, such that the rod can be inserted through both channels while intersecting the longitudinal axis of the first sleeve.

130. (Previously Presented) The system of claim 123, wherein the first channel is a linear opening parallel to a longitudinal axis of the first sleeve.

131. (Previously Presented) The system of claim 123, wherein the first channel comprises a non-linear shape.

132. (Previously Presented) The system of claim 131, wherein the non-linear shape is a helical pattern, an arc, an "L" shape, or an "S" shape.

133. (Previously Presented) The system of claim 123, wherein the first collar further comprises a notch configured to engage the first sleeve, wherein the notch may establish or inhibit rotation of the first collar relative to the first sleeve.

134. (Previously Presented) The system of claim 123, wherein the first sleeve further comprises a passage, said passage extending longitudinally from the distal end of the first sleeve to the proximal end of the first sleeve.

135. (Previously Presented) The system of claim 134, wherein the passage is sized to permit the passage of a tool for securing the first closure member to the first collar.

136. (Previously Presented) The system of claim 123, further comprising a frame, said frame configured to engage the first sleeve and the second sleeve for achieving distraction, translation, or compression of the first vertebra relative to the second vertebra.

137. (Previously Presented) The system of claim 136, wherein the frame is configured to provide a rigid coupling between the first sleeve and the second sleeve.

138. (Previously Presented) The system of claim 136, wherein the frame comprises a slidable element configured to translate the first sleeve relative to the second sleeve.

139. (Previously Presented) The system of claim 136, wherein the frame enables the first sleeve and second sleeve to pivot toward or away from each other.

140. (Previously Presented) The system of claim 136, wherein the frame allows angular or translational movement between the first sleeve and the second sleeve.

141. (Previously Presented) The system of claim 123, wherein the first bone screw is cannulated.

142. (Currently Amended) A surgical system for securing a rod to two bone screws, each bone screw ~~having a slot and each bone screw~~ being secured to a different vertebra, said system comprising:

a first bone screw, said first bone screw comprising a first slot having a slot width;

a second bone screw, said second bone screw comprising a second slot;

a first sleeve comprising a first channel, said first sleeve having a length longer than a length of the first bone screw, said first sleeve comprising a distal end at one end of the first sleeve and a proximal end at a second end of the first sleeve, said first channel being formed in

an opening of a sleeve wall of the first sleeve and said first channel extending along at least a portion of the length of the first sleeve;

a second sleeve, said second sleeve having a length longer than a length of the second bone screw, wherein said second sleeve detachably couples to [[a]] the second bone screw;

a rod, said rod having a width less than the slot width ~~necessary to fit within the first slot and the second slot~~;

wherein [[a]] the distal end of the first sleeve detachably couples to the first bone screw, such that the proximal end of the first sleeve extends away from the first bone screw, such that the first channel is aligned with a first slot in the first bone screw, and such that the first bone screw and first sleeve are substantially coaxial,

~~wherein during surgery, when the first slot is aligned with the first channel and when the second slot is aligned with the second channel, the rod is inserted in the first channel and the second channel for positioning the rod within the first slot and the second slot, and~~

~~wherein after the rod, the first closure member,~~ and the first bone screw are implanted, the distal end of the first sleeve is decoupled from the first bone screw.

143. (Currently Amended) The system of claim 142, wherein the second sleeve comprises a second channel, said second channel being formed in an opening of a sleeve wall of the second sleeve and said second channel extending along at least a portion of a length of the second sleeve, and

wherein when the second sleeve is coupled to the second bone screw attached to a second vertebra, the second channel is aligned with [[a]] the second slot in the second bone screw and the second bone screw and second sleeve are substantially coaxial.

144. (Previously Presented) The system of claim 142, further comprising a curved rod, wherein said curve compliments a curvature of a spine.

145. (Previously Presented) The system of claim 142, wherein the first channel extends a full length of the first sleeve.

146. (Previously Presented) The system of claim 142, wherein the first sleeve comprises two first channels, such that the first sleeve is a multi-channel sleeve.

147. (Previously Presented) The system of claim 146, wherein the two first channels are on opposite ends of the first sleeve's longitudinal axis, such that the rod can be inserted through both channels while intersecting the longitudinal axis of the first sleeve.

148. (Previously Presented) The system of claim 142, wherein the first channel is a linear opening parallel to a longitudinal axis of the first sleeve.

149. (Previously Presented) The system of claim 142, wherein the first channel comprises a non-linear shape.

150. (Previously Presented) The system of claim 149, wherein the non-linear shape is a helical pattern, an arc, an "L" shape, or an "S" shape.

151. (Previously Presented) The system of claim 142, wherein the first bone screw further comprises a notch configured to engage the first sleeve, wherein the notch may establish or inhibit rotation of the first bone screw relative to the first sleeve.

152. (Previously Presented) The system of claim 142, wherein the first sleeve further comprises a passage, said passage extending longitudinally from the proximal end of the first sleeve to the distal end of the first sleeve.

153. (Previously Presented) The system of claim 152, wherein the passage is sized to permit the passage of a tool for securing the first closure member to the first bone screw.

154. (Previously Presented) The system of claim 142, further comprising a frame, said frame configured to engage the first sleeve and the second sleeve for achieving distraction, translation, or compression of the first vertebra relative to the second vertebra.

155. (Previously Presented) The system of claim 154, wherein the frame is configured to provide a rigid coupling between the first sleeve and the second sleeve.

156. (Previously Presented) The system of claim 154, wherein the frame comprises a slidable element configured to translate the first sleeve relative to the second sleeve.

157. (Previously Presented) The system of claim 154, wherein the frame enables the first sleeve and second sleeve to pivot toward or away from each other.

158. (Previously Presented) The system of claim 154, wherein the frame allows angular or translational movement between the first sleeve and the second sleeve.

159. (Currently Amended) A system for performing spine surgery, said system comprising:

a first bone fastener configured to be fastened to a first vertebra, said first bone fastener comprising a first slot having a slot width;

a second bone fastener configured to be fastened to a second vertebra, said second bone fastener comprising a second slot;

a rod, said rod having a width less than the slot width ~~necessary to fit within the first slot and the second slot~~;

a first sleeve comprising a first channel, said first sleeve having a length longer than a length of the first bone fastener, said first sleeve comprising a distal end at one end of the first sleeve and a proximal end at a second end of the first sleeve, said first channel being formed in an opening of a sleeve wall of the first sleeve and said first channel extending along at least a portion of the length of the first sleeve;

a first closure member configured to be secured to the first bone fastener for securing the rod within the first slot;

a second sleeve, said second sleeve having a length longer than a length of the second bone fastener, wherein the second sleeve and the second bone fastener detachably couple together;

a second closure member configured to be secured to the second bone fastener for securing the rod within the second slot,

wherein ~~[[a]]~~ the distal end of the first sleeve detachably couples to the first bone fastener so that the proximal end of the first sleeve extends away from the first bone fastener and so that the first channel is aligned with the first slot,

~~wherein during surgery, when the first slot is aligned with the first channel, the rod is inserted in the first channel for positioning the rod within the first slot, and~~

wherein after the rod, the first closure member, and the first bone fastener are implanted, the distal end of the first sleeve is decoupled from the first bone fastener.

160. (Previously Presented) The system of claim 159, wherein the second sleeve comprises a second channel, said second channel being formed in an opening of a sleeve wall of the second sleeve and said second channel extending along at least a portion of a length of the second sleeve, and

wherein the second sleeve and the second bone fastener are configured to couple together so that the second channel is aligned with the second slot.

161. (Previously Presented) The system of claim 159, wherein the first bone fastener is a bone screw.

162. (Previously Presented) The system of claim 159, wherein the first closure member is threaded for threaded engagement with the first bone fastener.

163. (Previously Presented) The system of claim 159, wherein the rod is curved for complimenting a curvature of a spine.

164. (Previously Presented) The system of claim 159, wherein the first channel extends a full length of the first sleeve.

165. (Previously Presented) The system of claim 159, wherein the first sleeve comprises two first channels, such that the first sleeve is a multi-channel sleeve.

166. (Previously Presented) The system of claim 165, wherein the two first channels are on opposite ends of the first sleeve's longitudinal axis, such that the rod can be inserted through both channels while intersecting the longitudinal axis of the first sleeve.

167. (Previously Presented) The system of claim 159, wherein the first channel is a linear opening parallel to a longitudinal axis of the first sleeve.

168. (Previously Presented) The system of claim 159, wherein the first channel comprises a non-linear shape.

169. (Previously Presented) The system of claim 168, wherein the non-linear shape is a helical pattern, an arc, an "L" shape, or an "S" shape.

170. (Previously Presented) The system of claim 159, wherein the first bone fastener further comprises a notch configured to engage the first sleeve, wherein the notch may establish or inhibit rotation of the first bone fastener relative to the first sleeve.

171. (Previously Presented) The system of claim 159, wherein the first sleeve further comprises a passage, said passage extending longitudinally from the proximal end of the first sleeve to the distal end of the first sleeve.

172. (Previously Presented) The system of claim 171, wherein the passage is sized to permit the passage of a tool for securing the first closure member to the first bone fastener.

173. (Previously Presented) The system of claim 159, further comprising a frame, said frame configured to engage the first sleeve and the second sleeve for achieving distraction, translation, or compression of the first vertebra relative to the second vertebra.

174. (Previously Presented) The system of claim 173, wherein the frame is configured to provide a rigid coupling between the first sleeve and the second sleeve.

175. (Previously Presented) The system of claim 173, wherein the frame comprises a slidable element configured to translate the first sleeve relative to the second sleeve.

176. (Previously Presented) The system of claim 173, wherein the frame enables the first sleeve and second sleeve to pivot toward or away from each other.

177. (Previously Presented) The system of claim 173, wherein the frame allows angular or translational movement between the first sleeve and the second sleeve.

178. (Previously Presented) The system of claim 159, wherein the bone fastener is a ring shank fastener.

179. (Previously Presented) The system of claim 159, wherein the bone fastener is a barb.

180. (Previously Presented) The system of claim 159, wherein the bone fastener is a nail.

181. (Previously Presented) The system of claim 159, wherein the bone fastener is a trocar.

182. (Previously Presented) The system of claim 159, wherein the bone fastener is a brad.

183. (Previously Presented) The system of claim 159, wherein the bone fastener is cannulated.

184. (Previously Presented) The system of claim 123, wherein detachably coupling the first sleeve and the first collar comprises engaging a flange on the first sleeve with a flange on the first collar.

185. (Previously Presented) The system of claim 123, wherein the rod is dumbbell-shaped.

186. (Previously Presented) The system of claim 123, wherein detachably coupling the first sleeve and the first collar inhibits translational motion of the first sleeve relative to the first collar.

187. (Previously Presented) The system of claim 142, wherein detachably coupling the first sleeve to the first bone screw comprises engaging a flange on the first sleeve with a flange on the first bone screw.

188. (Previously Presented) The system of claim 142, wherein the rod is dumbbell-shaped.

189. (Previously Presented) The system of claim 142, wherein detachably coupling the first sleeve to the first bone screw inhibits translational motion of the first sleeve relative to the first bone screw.

190. (Previously Presented) The system of claim 159, wherein detachably coupling the first sleeve and the first bone fastener comprises engaging a flange on the first sleeve with a flange on the first bone fastener.

191. (Previously Presented) The system of claim 159, wherein the rod is dumbbell-shaped.

192. (Previously Presented) The system of claim 159, wherein detachably coupling the first sleeve and the first bone fastener inhibits translational motion of the first sleeve relative to the first bone fastener.